

**THE THIRTIETH LEGISLATURE
APPLICATION FOR GRANTS
CHAPTER 42F, HAWAII REVISED STATUTES**

Type of Grant Request:

Operating Capital

Legal Name of Requesting Organization or Individual: Db: _____
Hawaii Science and Technology Museum Hawaii Science and Technology Museum

Amount of State Funds Requested: \$ 25,000

Brief Description of Request (Please attach word document to back of page if extra space is needed):
Hawaii Science and Technology Museum (HSTM), a 501(c)(3) public charity educational nonprofit is seeking State Funds to continue providing much needed STEM education and research for the Hawaii Island Community. HSTM has spent the last four years delivering much beloved science camps, after school STEM programs, math tutoring, science exhibits, and special events like our "Science Nights" at our local DOE schools. HSTM supports student research, robotics teams, and business innovation through our Hawaii Explorations Expo. A grant award would allow us to continue to expand these much needed STEM educational programs to serve the keiki of Hawaii Island and their families. We intend to use this grant request to support our Community Robotics Center in Hilo.

Amount of Other Funds Available:	Total amount of State Grants Received in the Past 5 Fiscal Years:
State: \$ <u>0</u>	\$ <u>0</u>
Federal: \$ <u>0</u>	
County: \$ _____	Unrestricted Assets:
Private/Other: \$ <u>\$15,000</u>	\$ <u>approximately \$10,000</u>

New Service (Presently Does Not Exist): Existing Service (Presently in Operation):

Type of Business Entity:

501(C)(3) Non Profit Corporation

Other Non Profit

Other

Mailing Address:

734 Hele Mauna St.

City: State: Zip:

Hilo HI 96720

Contact Person for Matters Involving this Application

Name: Christian Wong	Title: Executive Director
Email: hawaii sciencemuseum@gmail.com	Phone: 808-938-3751

Federal Tax ID#: [REDACTED]	State Tax ID# [REDACTED]
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Authorized Signature

Christian Wong, Executive Director

Name and Title

1/16/20

Date Signed
10:52 am

received
1/17/2020 2:20

Applicant Hawaii Science & Technology Museum

Application Submittal Checklist

The following items are required for submittal of the grant application. Please verify and check off that the items have been included in the application packet.

- 1) Certificate of Good Standing (If the Applicant is an Organization)
- 2) Declaration Statement
- 3) Verify that grant shall be used for a public purpose
- 4) Background and Summary
- 5) Service Summary and Outcomes
- 6) Budget
 - a) Budget request by source of funds ([Link](#))
 - b) Personnel salaries and wages ([Link](#))
 - c) Equipment and motor vehicles ([Link](#))
 - d) Capital project details ([Link](#))
 - e) Government contracts, grants, and grants in aid ([Link](#))
- 7) Experience and Capability
- 8) Personnel: Project Organization and Staffing



AUTHORIZED SIGNATURE

Christian Wong Executive Director 1/16/20

PRINT NAME AND TITLE

DATE



Department of Commerce and Consumer Affairs

CERTIFICATE OF GOOD STANDING

I, the undersigned Director of Commerce and Consumer Affairs of the State of Hawaii, do hereby certify that

HAWAII SCIENCE AND TECHNOLOGY MUSEUM

was incorporated under the laws of Hawaii on 07/01/2015 ; that it is an existing nonprofit corporation; and that, as far as the records of this Department reveal, has complied with all of the provisions of the Hawaii Nonprofit Corporations Act, regulating domestic nonprofit corporations.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Department of Commerce and Consumer Affairs, at Honolulu, Hawaii.

Dated: January 16, 2020

Director of Commerce and Consumer Affairs



**DECLARATION STATEMENT OF
APPLICANTS FOR GRANTS PURSUANT TO
CHAPTER 42F, HAWAI'I REVISED STATUTES**

The undersigned authorized representative of the applicant certifies the following:

- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant is awarded;
 - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
 - c) Agrees not to use state funds for entertainment or lobbying activities; and
 - d) Allows the state agency to which funds for the grant were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant.
- 2) If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is incorporated under the laws of the State; and
 - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided.
- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
 - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawai'i Revised Statutes, for grants used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant used for the acquisition of the land.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Hawaii Science and Technology Museum
(Typed Name of Individual or Organization)

(Signature)

Christian Wong
(Typed Name)

(Date)

1/16/20

(Title)

Executive Director

Public Purpose:

If the Hawaii Science and Technology Museum receives this grant, it will be used for a public purpose pursuant to Section 42F-102, Hawaii Revised Statutes

I. Background and Summary

1. The Hawaii Science and Technology Museum is an educational, federally recognized 501(c)(3) non-profit formed in 2015 dedicated to Science, Technology, Engineering and Math (STEM) education on the Island of Hawaii. Hawaii Science and Technology Museum is a mobile museum bringing exhibits directly to the students to inspire and spark an interest in STEM. HSTM serves the Hawaii Island community through a multitude of much beloved outreach programs including after school programs, science camps, math tutoring, and special events like our "Science Nights" at local schools. Each year HSTM serves thousands of students in the Hawaii Island Community through our STEM outreach programs and parents often tell our staff and volunteers how much they truly appreciate the opportunity for their children to participate in creative hands-on STEM based learning. We at HSTM believe that every child deserves to receive a solid STEM education and that the future prosperity of our community and nation depend upon cultivating our next generation of innovators.

2. The Hawaii Science and Technology Museum is requesting State Funds for an Operating Grant and Capital Grant. We are requesting the Operating Grant to support our Community Robotics Center in Hilo and the Capital Grant with the goal of acquiring the old "Pinky's" Building in Papaikou, HI to convert the property into a science museum to serve the Hamakua Community and all the children of Hawaii Island and their families. A permanent facility will allow HSTM to continue to expand our STEM educational programs and provide all the outreach services expected from a large scale STEM Ed institution. Because of the partnerships we've developed over the past four years and the wide range of cutting edge research being conducted on Hawaii Island the keiki of the Hawaii Island Community will have the opportunity to engage with a multitude of STEM disciplines to stimulate young imaginations. Our goal is to lay a solid foundation within the community to be a dynamic resource for STEM education, a driver of innovation in our local economy, and to teach our keiki that with hard work, determination and curiosity anything is possible.

3. The public purpose and need of STEM education and support within the State of Hawaii is arguably greater at this moment than at any time previously. The upcoming generations will face great challenges posed by globalization and economic competition, environmental issues, public health issues and geo-political issues to name a few. The children in school now will need many of the tools a good STEM education provides including the ability to solve complex problems using the scientific method, working proficiency of current and future technology including computer programming skills and engineering and math skills. Likewise, it is the responsibility of the current generation to provide the skills, tools and knowledge for future generations to be able to stand on our shoulders and reach higher than we had dreamed possible. The Hawaii Science and Technology grant funding request being presented in this application gives the opportunity for all the students of Hawaii Island to have increased exposure to all the many varied disciplines in STEM and the career opportunities they bring. The award of State funds to purchase this property allows continued expansion of the services offered through the Hawaii Science and Technology Museum and will also create permanent STEM related jobs on Hawaii Island where average income and employment in STEM fields is below acceptable levels along with the rest of the State of Hawaii per Governor David Ige's prior press releases regarding STEM careers in Hawaii. A permanent facility for the Hawaii Science and Technology Museum will not only serve as an invaluable community resource for our keiki and steer them toward STEM related fields, but will also will help meet Hawaii State Governor David Ige's goal of providing more STEM related jobs within the State of Hawaii.

4. Our target population for all educational programs, exhibits and tutoring services is students grades K-12 and their families in the Hamakua Community and Hawaii Island as a whole. Again, by focusing our efforts on the upcoming generations, we strive to do our part to bring the State of Hawaii to the forefront of STEM education, careers, and research within the global community.

5. Geographical coverage of this project serves the Hamakua and East Hawaii Community on the Island of Hawaii but also because of the convenient location and ample parking allows our organization to serve all of the Hawaii Island Community with our outreach services and school field trips for hands-on STEM education and student led research projects. HSTM currently delivers outreach services island-wide; having a permanent facility as provided by this property we wish to acquire dramatically increases our ability to continue to expand this outreach in underserved areas of Hamakua and Hawaii Island.

II. Service Summary and Outcomes

1. If awarded State funds for operating purposes we will utilize these funds to provide services through our Kenyan K. Beals Community Robotics Center in Hilo. Capital funds are to acquire the old Pinky's property in Papaikou, the scope of HSTM work in reaching the goals laid out for the coming fiscal year include, but will not be limited to: conducting at least three school intersession science camps serving a total of 200 children K-12, continuation of STEM related exhibits and a STEM library in the new facility to serve the entire community, the continuation of math tutoring services for students K-12 serving at least 50 students, establishment of a robotics lab within the facility to further our support of innovation and robotics education for the entire Hawaii Island community, the hosting of at least 3 "Science Nights" special events serving at least 500 people total, and the new facility will be our home base for conducting and support of research of Rapid Ohia Death (ROD), endangered whale shark research, and our "Heart of the Wa'a" anthropology research project to preserve the knowledge and Hawaiian cultural significance of koa canoes in past and modern Hawaii. Each of the above projects based in this facility will involve scientists, teachers and field experts from throughout the community. The exhibits and library will be used to augment STEM learning within the schools by bringing exhibits and books directly to the children introducing them to a variety of STEM disciplines. The math tutoring will be available to increase math proficiency for those that need it and to challenge those students that are ready to move forward. These

goals for the coming fiscal year can be greatly expanded if the Hawaii Science and Technology Museum is able to secure the proposed structure as a permanent facility through the GIA grant. By having a permanent home on Hawaii Island all the children of our community would have access to our assets and educational programs.

2. With assistance from the Hawaii State Legislature through the GIA grant it would be possible to secure the existing structure as a permanent facility for HSTM in a matter of months to support and serve as the focus of our operations as the property is currently on the market. Our organization has been providing these STEM education programs for several years now on an outreach basis and we have received many, many positive reviews from children, parents, teachers, administrators, and community leaders. The establishment of a permanent facility through GIA would allow the timeline of delivery of programs to be year round and not dependent upon other partner organizations. We estimate the facility would be ready to host our first event on location 1-2 months after procuring it and from that point would be in constant use for STEM education for the Hamakua and Hawaii Island Community

3. Hawaii Science and Technology Museum utilizes surveys, interviews, and after action review meetings with enrollees, parents, staff, and partners to measure the success of each of the different programs. This has allowed our organization to continually improve our offerings to the public, most of which have been incredibly well received. Also taken into consideration, particularly for the math tutoring, will be the students' performance in school in STEM related subjects to ascertain whether or not the Hawaii Science and Technology Museum is meeting its goals of providing an increase in the level of STEM education within our community. Students and parents will be asked to voluntarily relate any improvements or lack thereof in the students' academic achievement and interest in STEM related subjects. Math tutoring students shall also use the non-profit Khan Academy website to keep track of each student's progress and as an evaluation tool to measure their performance. Parents will receive periodic reports of their students' progress as well as real-time updates through the use of

ClassDojo, another online student performance indicator. Evaluations of all programs shall be reviewed by the Executive Director and reported to the Board of Directors for monitoring so that improvements can be made. It is the belief of the Hawaii Science and Technology Museum Board of Directors that there is always room for improvement and will take any evaluations positive or negative into consideration when planning for future educational programs.

4. For all educational programs the Hawaii Science and Technology Museum shall submit aforementioned surveys, interviews, evaluations and actions taken for monitoring and improvement to the applicable expending state agency. For tutoring services, data collected will be collated and evaluated as to the effect of the tutoring services on the academic achievement and interest in STEM related subjects of participating students. Reports will be submitted to the expending state agency at the conclusion of each educational program and quarterly for tutoring services.

1. Describe the scope of work, tasks and responsibilities;
2. Provide a projected annual timeline for accomplishing the results or outcomes of the service;
3. Describe its quality assurance and evaluation plans for the request. Specify how the applicant plans to monitor, evaluate, and improve their results; and
4. List the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency). The measure(s) will provide a standard and objective way for the State to assess the program's achievement or accomplishment. Please note that if the level of appropriation differs from the amount included in this application that the measure(s) of effectiveness will need to be updated and transmitted to the expending agency.

IV. Financial

Budget

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.
 - a. Budget request by source of funds ([Link](#))
 - b. Personnel salaries and wages ([Link](#))
 - c. Equipment and motor vehicles ([Link](#))
 - d. Capital project details ([Link](#))
 - e. Government contracts, grants, and grants in aid ([Link](#))
2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year *2021*.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
<i>15,000</i>				<i>15,000</i>

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year *2021*.
4. The applicant shall provide a listing of all state and federal tax credits it has been granted within the prior three years. Additionally, the applicant shall provide a listing of all state and federal tax credits they have applied for or anticipate applying for pertaining to any capital project, if applicable.

V. Experience and Capability

A. Necessary Skills and Experience

The Hawaii Science & Technology Museum (HSTM) has an active Board of Directors, including Christian Wong, Executive Director. Christian has been instrumental in procuring support from: local community service clubs, insurance agencies, the Hawaii Community Foundation, Hawaii County Department of Research and Development, and the Hawaii County Economic Opportunity Council just to name a few. Through Christian's work, over the past four years HSTM has developed an extensive network of community partners including: Mokupapapa Discovery Center, Hilo Intermediate School, Hamakua Youth Foundation, 'Imiloa Astronomy Center, EB DeSilva Elementary School, Kaumana Elementary School, Keaau Elementary and Middle School, the Hawaii Space Grant Consortium, and the Hawaii State Public Library System to offer STEM and STEAM based camps, special events, after school programs, exhibits, tutoring sessions and much more. HSTM programs have been featured numerous times in local print and digital media publications and have received stellar evaluation reports from students and parents alike that have participated in the various events. Additionally, the seven members of the Board of Directors have over eight decades of combined work in education. All seven members possess the minimum of a Bachelor's degree, while two hold a Master's degree, and three possess Ph.Ds. – all in a STEM or educational field. Verifiable current experience of the board includes: a member who serves as an executive to administer research, development, and training with a state government agency; the chief scientist of a major observatory; a health industry business owner; four current teachers of STEM related materials; and two board members available to run operations of

HSTM that are highly trained and certified in the Incident Command System. As a team, the HSTM Board of Directors bring not only many years of experience in the field of STEM, but a genuine passion for serving the community and have done so for many, many years. Collectively, HSTM board members have received numerous public service awards including one board member, Dr. Pascale Pinner, who was recently awarded the Albert Einstein Distinguished Educator Fellowship for the 2018-2019 year.

B. Facilities

The Hawaii Science and Technology Museum currently does not have its own facility. Plans to secure facilities include application for the GIA Capital Grant Request, upcoming application for grants through county and federal government, and solicitation of private donations, and partnerships such as our Kenyan K. Beals Community Robotics Center. For the upcoming educational programs, exhibit and library tours, tutoring services, and research Hawaii Science and Technology Museum has forged partnerships with local schools and other organizations to conduct operations to serve the children of Hawaii. As HSTM has grown exponentially the past four years the need for a permanent facility has become the limiting factor on our ability to provide STEM education services and research year round for the Hawaii Island Community. We have chosen the Hamakua Community as the potential site because of the great need for STEM education in this area with limited access to these types of programs for their children but would still retain the ability to serve all the children of Hawaii Island and also attract visitors to our island to help boost our local economy with STEM related careers.

VI. Other

A. Litigation

The Hawaii Science and Technology is not party to any litigation.

B. Licensure or Accreditation

The Hawaii Science and Technology Museum itself possesses a Hawaii State GE License to operate as an entity conducting business within the State of Hawaii. The seven members of the Board of Directors for the Hawaii Science and Technology Museum possess Bachelor's degrees in STEM related fields, two board members possess Master's degrees in STEM related fields and three board member possesses Ph.Ds in a STEM related or teaching field and two board members possesses a certification in teaching for the State of Hawaii. The Executive Director of the Hawaii Science and Technology Museum possesses certification in the National Incident Command System for conducting operations as planning using the Incident Command System.

C. Private Educational Institutions

The Hawaii Science and Technology Museum is not a private educational institution. HSTM is an educational, federally recognized 501(c)(3) not-for-profit incorporated public charity.

D. Future Sustainability Plan

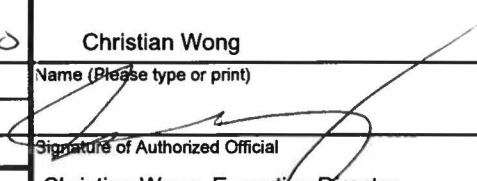
In the event the Hawaii Science and Technology Museum 1) Receives a grant for the 2020-2021 fiscal year but, 2) Does not receive further GIA funding the HSTM shall continue applying for alternative grants to support the services provided to the Hawaii Island Community at county, state and federal levels. In addition, the HSTM shall solicit donations from private individuals, foundations, and businesses willing to invest in furthering STEM education and research in the State of Hawaii. If necessary, HSTM shall charge/increase tuition for various educational programs if absolutely necessary in order to continue providing services to the public. The programs set forth in this plan are self-sustainable, however if awarded a capital grant to acquire a permanent facility it would allow HSTM to greatly increase our

ability to serve more students, create more STEM related jobs, and generate revenue through membership, special events and sales of merchandise.

BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2020 to June 30, 2021

Applicant: Hawaii Science & Technology Museum

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
A. PERSONNEL COST				
1. Salaries	5,000		5,000	56,000
2. Payroll Taxes & Assessments				
3. Fringe Benefits				
TOTAL PERSONNEL COST	5,000			
B. OTHER CURRENT EXPENSES				
1. Airfare, Inter-Island			2,000	1,000
2. Insurance			2,500	2,500
3. Lease/Rental of Equipment				2,000
4. Lease/Rental of Space				3,000
5. Staff Training				5,000
6. Supplies				5,000
7. Telecommunication				500
8. Utilities				
9. Marketing				
10. Research Publication				
11. Professional Services (Accountant/and			2,000	3,000
12. Attorney				
13				
14				
15				
16				
17				
18				
19				
20				
TOTAL OTHER CURRENT EXPENSES				
C. EQUIPMENT PURCHASES	20,000		15,000	10,000
D. MOTOR VEHICLE PURCHASES				
E. CAPITAL	1,300,000			
TOTAL (A+B+C+D+E)	1,325,000		26,500	88,000
SOURCES OF FUNDING		Budget Prepared By:		
(a) Total State Funds Requested	1,325,000	Christian Wong		(808) 938-3751
(b) Total Federal Funds Requested	0	Name (Please type or print)		Phone
(c) Total County Funds Requested	5,000			January 16, 2020
(d) Total Private/Other Funds Requested	88,000			Date
TOTAL BUDGET	1,418,000	Christian Wong, Executive Director		
		Name and Title (Please type or print)		

BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2020 to June 30, 2021

Applicant: Hawaii Science & Technology Museum

DESCRIPTION EQUIPMENT	NO. OF ITEMS	COST PER ITEM	TOTAL COST	TOTAL BUDGETED
Equipment to build Robotics Lab	Approx 20	Avg 1000/item	\$ 20,000 -	20,000
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				20,000

JUSTIFICATION/COMMENTS: Requesting 20,000 in State Funds. Also seeking funding from alternate sources including private donations.

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	TOTAL BUDGETED
			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				0

JUSTIFICATION/COMMENTS: No funding requested for vehicle purchases.

BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2020 to June 30, 2021

Applicant: Hawaii Science & Technology Museum

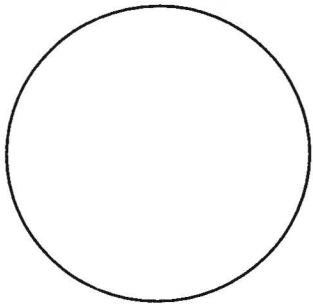
FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OTHER SOURCES OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2018-2019	FY: 2019-2020	FY: 2020-2021	FY: 2020-2021	FY: 2021-2022	FY: 2022-2023
PLANS						
LAND ACQUISITION	0	0	1,300,000	0	0	0
DESIGN						
CONSTRUCTION						
EQUIPMENT						
TOTAL:	0	0	1,300,000	0	0	0
JUSTIFICATION/COMMENTS: Requested funds to purchase old "Pinky's" Store in Papaikou at 27-289 Mill Road, Papaikou, Hawaii 96781 to convert into a Science Museum to serve Hamakua District and the Hawaii Island Community.						

GOVERNMENT CONTRACTS, GRANTS, AND / OR GRANTS IN AID

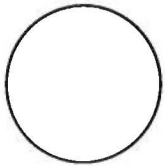
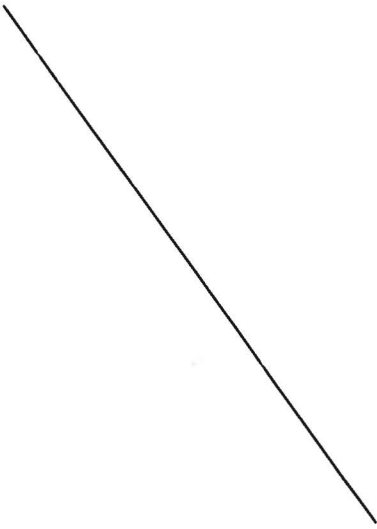
Applicant: Hawaii Science & Technology Museum

Contracts Total: 2 -

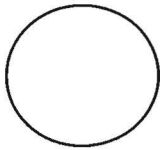
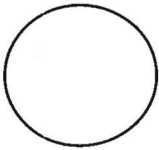
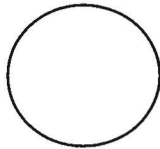
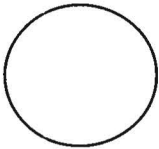
	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S. / State / Haw / Hon / Kau / Mau)	CONTRACT VALUE
1	Kilauea Eruption Recovery	7/1/19-12/31/19	Hawaii County Rot D	Hawaii County	\$10,000
2	CubeSat Development	7/1/19-12/31/19	Hawaii County Rot D	Hawaii County	\$5,000
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Executive Director,
Board of Directors



STEM Network
Liaison



Volunteers